work, and then to make an effort to move this into the virtual community. If you do these things, then it's not just marine debris, it's all the issues that are in common in the Pacific Basin. You have the mechanism, you have the focal point, and you have the means to communicate and transfer that knowledge. But you've got to start somewhere in picking up, as we say, the corner of the rug.

Marine debris is an easily understood topic to the world. At a very general level everybody understands what it is about. It's a common resource topic that is not complex. So it's a perfect one, I would argue, to begin to build a partnership and demonstrate leadership in pushing a community to where it needs to go. Dr. Baker was correct. There is a window of opportunity, but if you don't embrace it and go after it aggressively at this point in time, you may be here ten years from now having a marine debris conference that we obviously talked about in 1987 and have been wrestling with for about twenty-five years. So in trying to lead the charge, I don't have a bugler, but my recommendation to you to is to stick with the process, make the effort to work in these working groups, push your facilitators, push your working group chairs, be sure the issues get out, then use the process to get to those priorities and, finally, take the ownership to write things down.

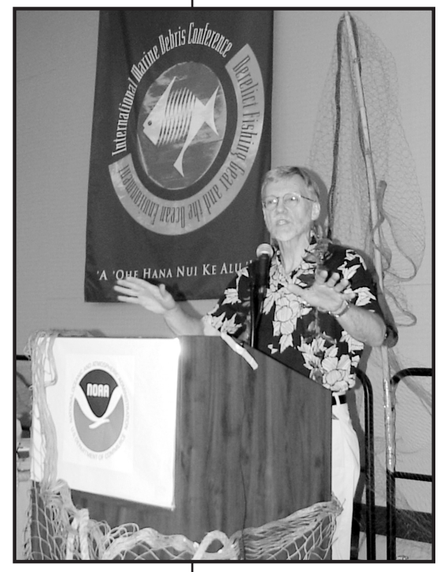
There is a logic to this. Truly, it's not just make-believe, I think you have a great opportunity. So with that, Allen, I think that's the only charging I can do. So I'm going to give it back to you. Good luck everyone and I'm going to be doing my little bit to help in the next four days.

• Transcribed from a speech given on August 8, 2000.

VIEWPOINT OF THE ADMINISTRATION

D. James Baker, Under Secretary, U.S. Department of Commerce, Washington, D.C.

Thanks Allen for the opportunity to be here. I just came back from the Coral Reef Task Force meeting, but I was also doing what we call NOAA in Samoa. We have four of our five line organizations represented there, with measurements of air chemistry, a marine sanctuary, marine fisheries, and the weather service all in that one area. It's obviously a critical spot, being the southern-most location in the United States, to pull all these things together. Of course, the Coral Reef Task Force was an important meeting.



Bob Rock, Marine Debris Communications Committee

Dr. James Baker, then the Under Secretary for Oceans and Atmosphere for the U.S. Department of Commerce's National Oceanic and Atmospheric Administration, delivers words of encouragement from the Presidential Administration.

Before I turn to the results of that meeting, let me talk about this conference, which is, as you saw in my letter in the booklet, the first of its kind. Marine debris is one of those problems that you are all aware of, but the public is not. So what you're doing is very critical. Twenty years ago we didn't recognize this was an issue. But today we know that we're going to be overwhelmed if we don't take action. This is typical of many ocean issues today.

We haven't been able to do a lot about solving these problems, but now we have new technologies and lots of interested parties. We have to start doing something now. That's why a conference like this is critical, and why we were able to get the Vice President to send us a letter, which I will now read.

Dear Jim:

Thank you for supporting the International Marine Conference currently underway. I hope the conference proves to be a successful and productive event. This important gathering brings together private and public sectors from around the world to assess the problem of derelict fishing gear and to recommend solutions. I share your concerns about the need for greater human stewardship about our marine environment. Unfortunately, not a day goes by when marine debris is not washing up on a shoreline entangling marine mammals, smothering around a coral reef, or wrapping around a boat propeller. We have learned perhaps the hard way that our ocean and coastal areas cannot withstand the onslaught for which we have subjected them over the past decades. I do believe that positive strides are being

made to combat this growing concern. Annual beach cleanups, scientific research on currents and biodegradable products, industrial breakthroughs and educational efforts all aid in finding solutions to this problem. In Hawai'i alone, volunteers have removed more than 35 tons of derelict fishing nets from reef and shorelines. But there is so much that can be done. I look forward to working with you in the future to ensure that all options are considered as we race to save our planet's precious marine resources. I look forward to hearing the results of the conference. Please extend my warmest wishes to the participants.

Sincerely,
Al Gore

So you can see that we have vice presidential interest here. Somebody should work up a debate question and see if we can get ocean issues raised in the Presidential candidate debates.

We have just finished our 5th Coral Reef Task Force meeting in America Samoa. The Task Force has gone to each of the areas of the U.S. that has coral reefs. We started in Florida, then Maui, the Virgin Islands, and then we went to Washington, which doesn't actually have any coral reefs, but we were doing budgets. Finally, we went to American Samoa. I think we achieved a lot of enthusiasm and interest there. Of course, one of the big heroes of the meeting was Captain Terry Rice, who is here from the Coast Guard. He played a key role in helping remove the boats that washed up on the reefs during Hurricane Val in 1991. This had been a problem for quite a long time. The task force raised the issue and Captain Rice was instrumental in solving the problem. Also at the meeting were Michael Crosby and Rusty Brainard from NOAA, Dave Jansen from Congress, Roger Rufe from the Center for Marine Conservation, and Dave Hoffman from the NOAA Climate Monitoring and Diagnostic Laboratory.

Let me say a few words about the results of the Coral Reef Task Force. This has been an exciting adventure. We started with eleven federal members from the federal agencies that have something to do with coral reefs ranging from the Department of Commerce/NOAA, Department of Interior to Defense, Coast Guard, Transportation, NASA, NSF, Agriculture and so on. It became clear that we had to also involve the states and territories. So we very quickly, at the first meeting, agreed that we would add representatives of the states and territories that had coral reefs. So all of the U.S. states and territories, all the Pacific Islands, and the Caribbean Islands are represented there in our discussions. That has added a certain liveliness to the activity. In fact, the islands were out in front of everybody else with their "All Islands Initiative." The All

Islands group took us out at the meeting in Maui to one of the rooms at the sanctuary and said, "Please listen. We've got a good plan here and we want you to listen to what we're doing." I think you can see from the accomplishments that we have followed that advice.

The Task Force has made real progress; we have a plan. We've made progress in mapping, monitoring, and conserving U.S. coral reefs. We have significant new funding this year, and we've developed some very nice partnerships. Unfortunately, Congress did not continue that money in the budget for next year. I'll say a little more about that in a minute.

But we do know that coral reefs are important to our economy. When you look at the total impact of coral reefs on fisheries and tourism here in Hawai'i our numbers show that half a square mile of a coral reef preserve will bring in something like $9 million each year to the economy. We see this in all our island states. We saw it very clearly in American Samoa that coral reefs are a critical part of the island culture. So we're not just protecting a beautiful area or trying to have a sustainable commercial fishery, but we are preserving the sustainability of communities. I think this is essential for the long-term.

This past year we developed the first U.S. action plan for the conservation of coral reefs; this was a major new step. It's a blueprint for how we would operate in the future. It lays out a series of priority actions that we need to take and the first comprehensive action that we put together for coral reefs in the U.S. It dovetails very nicely with the International Coral Reefs Initiative, which was already in place there.

At our meeting in American Samoa we looked at a number of items related to that action plan. We have provided about $2 million to states, territories, and commonwealths to support local and regional efforts. We've launched a massive effort for mapping with the point of view that if you don't map what you have, you're also not going to know where you should go to conserve; you're also not going to know what the trends are. We're using all the different techniques: on-site techniques; surface-based techniques; aircraft and satellites to map where the coral reefs are. We're determining what the geography is, what the geology is, and what the biological diversity is. We have some wonderful maps. If you want to see any of these you just have to go on the web page: coralreef.gov without the www. We're trying very hard to get all of the information onto the web page; your comments are welcome.

Another important achievement was the removal of the nine grounded ships that were damaging coral reefs in American Samoa. You can't see them now; that's because the Coast Guard, NOAA, and Interior found a way to remove what was remaining of those ships and to use the oil pollution act as a way to get some of the funding. The harbor looks wonderful now. It's an important accomplishment for the Task Force. As you know, you can't always point to real accomplishments by government tasks forces.

We also have used the Task Force to raise the issue of anchoring in protected habitat areas. Not just coral reefs, but all kinds of protected habitats. You know that the International Maritime Organization is not easy to move in terms of putting new regulations in, but they felt very strongly that establishing no anchoring areas by large ships in coral reefs and other fragile habitats was a sensible thing to do. This would be a way of protecting, for example, the coral reefs in the Flower Gardens Marine Sanctuary, U.S.

The Task Force has also completed the first ever inventory of U.S. coral reefs marine protected areas. We are looking at ways to improve the effectiveness of those marine protected areas. Right now the action plan calls for at least 20% of the coral reef area to be set aside by 2010 to be used as replenishment zones. This would rebuild the coral reefs with what we call no-take ecological reserves. And, of course, we're working hard on the specific definition of no-take to make sure that we can satisfy some local subsistence needs. It's very clear that you have to have some protected areas in the reefs and this is one thing we are working on.

We have also identified a need from the Pacific islands for a Sea Grant program. We are working closely with them as they start the development process. The Sea Grant program has been very important in the continental U.S. as we look at ways to merge and link research and applications in the oceans area. We're hoping we can develop such programs out in the Pacific islands.

The All Island Coral Reef Initiative includes Hawai'i, American Samoa, Guam, Puerto Rico, U.S. Virgin Islands, and the Commonwealth of the Northern Mariana Islands. We were able to get about $1.3 million out to the islands to implement all of these coral reef conservation measures; that was a good start. With the enthusiasm and success so far, we were able to get the President to put together a request of $26 million for coral reefs: $16 million in Commerce and $10 million in Interior. This is a big increase from the year 2000. The $10 million in Interior seems to be moving along pretty well, but the $16 million in Commerce is not there at the moment. We are urging Congress to look carefully at this as they go into conference on these bills. This is something we need if we're going to make sure that ten years from now we're not looking back on any damaged reefs.

We took a number of other actions. We agreed to assist the White House Council on Environmental Quality in developing new guidance under the National Environmental Policy Act, NEPA, to make sure that the actions that federal agencies take do not degrade coral reefs. NEPA is a powerful framework for us to work in.

That pretty much covers what we've done. We expect to have an oversight policy in place somewhere later this year, no later than November. The oversight policy takes the ideas of

the Presidential Executive Order and turns them into a transparent process. That means that agencies say what they're going to do. If there is a petition from somebody saying we don't think that's really going to work, the agency responds. There are timelines and deadlines built into the system and everything is open so it's clear how the task force works. We have codified the way we operate because it has been so successful up to now.

That concludes my discussion of the Coral Reef Task Force. Thank you for the opportunity to speak today.

I'd be happy to take questions from the press, but we're also looking for questions from anyone else. I'll also have an opportunity to talk with anyone else after this discussion here.

I urge you to go to American Samoa and have a look at the reefs, the culture. It's a beautiful part of the world, but you all know that.

QUESTION AND ANSWER PERIOD

(Question regarding roads) I think most of those causeways have been removed. This is something Captain Rice can explain further. We went through a very, very careful process of removing the corals before the big cranes came in and then re-cemented them back in place. Right now there is a very extensive effort going in to finish this work that was started by Dave Kennedy and his group at NOAA.

(Question regarding policy) Well it certainly is our intention to do that. I think we recognize that whenever we put in these kinds of regulations, you have to have some money. That was the reason for the fairly expansive presidential budget request this year. We will continue to do that as we go forward because you can't just put down rules without having some budget support. One of the reasons for this marine debris conference was to get some thoughts about incorporating the ideas of removing marine debris into this idea of marine protected areas. We want feedback on the recommendations of this conference for the marine protected area concept.

(Question) Well there are two questions there. One is that the cooperative process works very well. We're all big believers in trying to work cooperatively and trying to find imaginative ways in trying to do things. At the same time, you can't move too far away from the way the funds were originally set up. So one of the things that we agreed that we would do was to set up a small group that would look at the broader implications of what we had done in American Samoa. We wanted to see if we could apply some of the same funding and some of the same ideas that we accomplished there.

(Question) There's a very important bill that is currently moving in both House and Senate. It passed in the House and we have a version in the Senate. This is the Conservation and Reinvestment Act, or CARA, which uses royalties from oil and gas revenues to fund land acquisition and coastal zone protection. It's a very important act. I think we can come very close to getting agreement between the administration and the Congress of how things can be managed under that. It's just a question of trying to get it through in a shortened congressional session. As you look at things that you want to accomplish, the CARA bill as we call it, is going to be very important. I believe it's either going to happen this session or next session because there is very broad support.

(Question) Okay, two questions. The first question is the political question about the transition of institutions from one administration to the next. Since the Clinton/Gore Administration established the Coral Reef Task and I have a letter here from the vice president, he is obviously very supportive. He would certainly see things continue. In the case of a republican administration, we know that Republican Candidate George W. Bush's brother, Jeb Bush, is the governor of Florida. Any governor of Florida, particularly this governor, is very engaged in coral reefs. We talked with the head of the Florida Department of Natural Resources as a member of the task force and he said, "Yes, the governor is very committed." So I don't think you could get any closer than having the brother of a presidential candidate. But that's for the issues we have and I think that's pretty good. So I say, yes, there's a very good probability that regardless of which administration wins in November you will see strong support for this. We've been pointing out the importance of the issues, the need to codify the actions of the task force, the cooperative work that we do, and the way agencies have been able to accomplish things. We hope that the new administration would say, "Yes, that's a good thing. I think we should continue it." I think we have a very good opportunity because these are issues that really transcend politics at this point.

(Question) It's always a good question, but let me just say that all of us in this room have been pushing ocean issues for a long time. I think these issues have not always gotten the attention they deserve. I certainly see that as I work on the NOAA budget, and others see it in other parts of agencies. But we were able to convince the President, the First Lady, and the Vice President to come out to Monterey in 1998 to hold the first-ever National Ocean Conference. And as a part of the National Ocean Conference, we got a commitment from the Office of Management and Budget to make real progress in about fifteen different areas that ranged all the way from ocean exploration, oil spills, marine transportation, and Coast Guard issues, to national security, and marine protected areas. I think that shows a real commitment. Since then, the President has made his commitment about marine protected areas, and he created the Coral Reef Task Force. There's a whole set of things

happening that have not happened since the time of Lyndon Johnson who was also very engaged in ocean issues. I think this is not just a question of where we are in the timing of administration. You could be cynical and say, "Hey, the administration has reached the end of an eight year term and they're looking for legacy issues so they picked something." But I think it is mostly the fact that the trends are all driving these issues to be critical. That's the fact—the public is feeling these things, that society and business feel strongly about this. Our fisheries issues get more and more important as we see the stress on fisheries and the need to try to have sustainable fisheries. I think the politics are driven by the underlying trends that are there. This administration has responded and I think you'll see exactly the same thing in a Republican administration. So I think there is a real opportunity which builds on the same recognition that we had to have that National Ocean Conference to pull all the stakeholders together. This conference here is just one more piece of that.

(Question) The question was what are other countries doing about marine debris? I don't know the answer to that, but there are a lot of people here who do. Either in the issue papers or in the discussions you are going to hear a lot about that topic I know.

(Question) Well the most important thing is for members of Congress to hear from constituents that subjects are critical. Over the past twenty years or so and into the beginning of the Clinton administration, the focus was generally on what could you cut in order to make sure your spending equaled your income. But we are on a different playing ground now; we have a budget surplus. Some of that surplus we can use to reduce the debt, but some of that surplus can go to other programs. In this new framework there is an opportunity to talk to your member of Congress and say, "this is a topic that is important to me and I think you should consider it when you look at the budget process." Discussions and letters directly from constituents to members are very effective in the U.S. government process. That's something you should all be doing and I know you have been doing it because I can see the impact on Capitol Hill. The other thing is coming together in groups like this and writing resolutions, making sure that you're addressed by the right members of Congress and you've just done that because you've had Senator Inouye and Senator Akaka here. Visiting Washington is also useful. The more awareness that they get from hearing what they care about, the better we will all do.

• Transcribed from a speech given on August 8, 2000.

BRIDGING THE POLICY, SCIENCE, AND MANAGEMENT STREAM

Honorable Neil Abercrombie, Representative, United States Congress, Hawai'i

Thank you very, very much. Mahalo and aloha everyone. Aloha. Thank you for the opportunity for me to be here. I know with some trepidation that I am supposed to kind of keynote this luncheon panel session. I am very pleased to be sharing the platform, at least in its initial stages with the people who will be addressing you, whose cards you can see here, Ms. Lent, Mr. Rufe, and Mr. Julian. I think that what they have to share with you will be very, very important.

Now I expect that many of you, even the young people that are here today, have been addressed by elected officials and politicians before, and politicians generally start off by saying how happy they are to be some place. And I don't want to break that tradition. I want to say how happy I am, but the difference is that I mean it quite sincerely because this does give me an opportunity. And as you know about politicians, an opportunity to speak is something that they treasure.

It does give me an opportunity to acquaint some of you, especially the young people, with what we are actually doing in the United States Congress.

There is sometimes a disconnection between the academic and scientific community for those who are particularly interested in the environmental aspects. Whether it's of ocean science, marine biology, or any of the speculative activity that might be associated with the ocean, up to and including commercial activity in fisheries.

Sometimes a disconnection exists between that and the political sphere. What I am about to do today in the few minutes that I have to speak with you is indicate to you very, very clearly, I hope, that such a gap exists that shouldn't and that I can help close that gap if it exists today. I want to do it.

Now, having come from an academic background myself, perhaps I don't necessarily have a prejudice in that direction. But I certainly have some experience and some comprehension as to what is necessary in order to make certain that whatever risks there might be, or seem to be, get healed or stitched together as quickly as possible. The oceans cannot afford to have that kind of gap much longer.

I am a member of the Resources Committee, but not all of you may be familiar with that particular phrasing. It used to be called the Committee on the Interior. It is the same thing, because much of the work we do in the Resources Committee in the Congress of the

United States has to do with land issues, water issues, anything having to with what is generally thought to be involved with the Interior Department of the United States.

I have served on park committees, ocean committees, insular affairs committees. Many of the young people here today, of course, are from our Pacific and island neighbors to the west of us. As a result, those who have served on the committee for some time have developed some expertise, perspective, and depth of knowledge with respect to the subject matter with which they're required to do legislation. This is not so much an argument against term limits as it is an argument for keeping people in Congress who are judged to be competent and useful to their districts.

Now, on the particular instance that I am speaking of here in my work with the Resources Committee, I am just going to cite very quickly as an example, "coral reefs."

We now have a bill in the House of Representatives that we are dealing with in the Resources Committee with respect to the protection, preservation, and the maintenance of coral reefs. We are trying to do this in the context of trying to figure out what global warming means and what long-term and even short-term trends might be in terms of climate and how that would affect the ocean. We are trying to deal with it in the commercial context through the Department of Commerce with regard to fisheries and the proper management and mission of the fisheries that may exist, especially in the Pacific areas where coral reefs are located.

We have a more particular responsibility in the Hawaiian Islands with respect to those coral reefs that we have some nominal jurisdiction over. We deal with those aspects of the Department of the Interior through the Fish and Wildlife Service that have regard for and responsibilities and obligations to deal with the ocean environment. What I want to get across to the young folks, some of whom have already spoken to me in the brief moments that we had a chance to meet one another here today, is what they can do to effectuate some kind of immediate response. They can take some immediate responsibility and urge those who now have "charge of these issues," if you will, to make certain that we will act in such a way as to leave something for them to be able to protect, preserve, and utilize in the proper way.

I want to say in that context, it is somewhat frustrating to me as a member of the National Legislature United States Congress and a member of a very hardworking committee of very knowledgeable people, to see disputes go on between the Department of Commerce and the Department of Interior. I can tell you that the legislative intent that we have, whether it's with regard to coral reefs or marine debris, as such, has to do with the ocean environment concerned. People are going to insist upon a parochial and narrow vision of what it is that they are responsible for or who is best able to do it. They don't take into account the cooperative

endeavor I and most of my Republican or Democrat colleagues believe is necessary to accomplish these overarching goals with respect to the ocean environment and, even more particularly, towards inner space.

We seem to have a predilection in the United States, in particular today, towards dealing with questions regarding outer space. There is a certain romance to it, there is a certain exploratory quality that is enumerated over and over again, "a look to the star" kind of approach to outer space which is seen as visionary, which gets broad support from people who are willing to commit many resources. And we do not take into account that the oceans, which take sufficient account in my estimation, constitute better than three-quarters of our planet. The oceans constitute, for the most part, inner space, which is yet to be explored, let alone exploited, in a manner that can, in any way, be associated with the kinds of knowledge, commitment, and focus that we have in outer space.

Therefore it is even more imperative that those that have the governmental responsibilities and obligations of law to try to effectuate activity in and on the oceans with respect to all the items that I have outlined. It is even more important that they work in a more cooperative way with us. It's sometimes disappointing to me to see announcements in the newspaper about proposed objectives in various departments which have not really been shared with the Congress or that Congress has seen as some sort of an obstacle. We have not yet fully taken into account that the role of the player may not be played by the U.S. Military and/or the Coast Guard. When decisions are made on an international basis we need to see to it that they, in fact, will be supported and enforced. We've got to make some basic decisions about that.

On land we are making those kinds of decisions for better or for worse. I'm not saying that every decision gets made with the use of coercion as in body or international forces of one kind or the other. I am on the Armed Services Committee as well and I can tell you that these are problems not easily resolved in a post cold war world.

We now have a situation with the United States Military and International Forces under the United Nations in which they not only have a war fighting capacity, but they have to have a peace-keeping and peace-making capacity as well. I foresee a time in the very near future and, in fact, I believe in the immediate future, where we have to make decisions about international enforcement of international regulations, laws, and other protocols that might be developed. Enforcement will be required, if not the U.S. Navy and Coast Guard, by international forces or navies and coast guards throughout the world cooperating with one another. There need to be a clear understanding as to what will constitute enforcement, and what the penalties will be for disobeying the rules and international rules and regulations, not just of commerce, but of interaction on and under the sea.

Now, that is something we have to come to grips with and to try to ignore it seems to me if we do so our peril is certainly the ocean's peril. So, I believe and I want to emphasize to you that I think we need, to have if you will, a kind of intellectual memorandum of understanding with one another.

We have to make a commitment to one another and with one another that we will not only act in a theoretical way or an academic way with regard to the oceans and the ocean environment and with that which takes place in and on the ocean. We need to carry through with effective institutional mechanisms of enforcement of those decisions that we have made to see to it that we have all lived up to what we need to do. In many instances it is going to mean that institutions such as the Commerce Department and the Interior Department are going to have to sit down with one another and decide how best to implement the legislative intent that I am talking about. If we don't do that, and if we are not able to do that, we are going to end up doing two things. First of all, we will violate what I consider to be a fundamental legislative intent, which is that legislators should write laws respecting the intent of policy. The mission and the goals of the legislation should be embodied in the law.

The rules, regulations, and management act should not be included in the law because no law can be written that takes fully into account all the circumstances that will have to be met, most certainly, the changing circumstances that take place as a law is implemented. Just take the question of commercial fisheries utilizing use of the oceans on the one hand, the Department of Commerce that I mentioned, and then take the idea of preserving the resources of which may involve coral reefs. Again, I'll use that as an example because it's right in front of us that maybe the Interior Department has and then watch them fight with one another. Then you end up then with the Legislature saying, "Okay, if you folks can't come to some memorandum, some basis of understanding as to how this business will be conducted, what kind of environmental situation exists, what kind of science needs to be applied, what kind of commercial and/or recreational or other environmental aspects will come as a result and what other implications there are, then we'll have to do it in legislation itself." That's not a good idea.

I don't think that is the way we should approach it. It is impractical and it doesn't work very well. Now, if it doesn't, then the Legislature is going to have to require that and we want to try and avoid that if we can in my estimation. So I am hoping that this key problem between policy and management, and this is something you young folks have got to understand, takes more than having good ideas and having good intentions. You have to have your policies very clearly in mind based on the best science and the best understanding of where you want to go. But then you have to manage it. After that, that is almost the easy part, you have to figure how, in fact, you are, in the practical every day world, going to manage it and how you can get people to pay attention to what your real problems are.

Coastal scientists and policy makers, who as far as I am concerned don't interact sufficiently, whether it's on the coast or out on the ocean itself, to ensure that decisions and policies are adequately based in science or are making some progress. It's not enough and the scientist culture, as I have indicated, is different from the policymaker's culture. In the end, if there is a vacuum of recommendations based upon people being able to come to conclusions as to how best to manage the resources, the policy makers, people like myself, are going to make that decision. We don't want to make that decision in a vacuum, but if that happens, that is what we will do. And so we want to move on a broad basis.

Now one of the things that is taken up in Hawai'i, and I'm sure a lot of you have paid attention, is longline fishing problems and dealing with the second area that I want to bring up. If we fail to make the kind of management decisions that I'm talking about, based on policy of mutual understanding of the difficulties involved, what you end up doing is focusing on single issues. When you focus on single issues you miss the context within which multiple problems or multiple level problems have to be solved. I don't even want to use the word problems, let's use the word challenges—multi-level challenges have to be answered. It does no good to have a judge or a legislator because, I tell you right now, I'm the judge when it comes to the oceans in the Pacific sitting on that committee, or Representative Faleomavaega from American Samoa, or Representative Underwood, or any of us from the Pacific area that are on the Resources Committee. I don't want to be the judge, that is not my function. But by default I end up being that. Or if by default, we end up in court where there is Judge Ezra or anybody else, doesn't make any difference. It tends then to be single-issue politics. Single-issue politics. The ocean is politics. If you think you're going to avoid politics when it comes to science, when it comes to the ocean environment, not only are you dreaming, but you're doing a disservice to that what you say and presumably all of us here in this conference are dedicated to.

The question is whether it's going to be good politics or bad politics. That's what the question is. When you are unable to resolve your challenges and you end up in a court making decisions, that is an expression of failure in my judgment rather than a reasonable or rational way to resolve the issues. Because a legal conclusion is not necessarily a resolution of the issues or the circumstances around which the issues were contended. So in some respects I'm giving you a little bit of a sermon today and an admonition. It's not because I'm accusing anyone in here, quite the opposite. I'm pleading with you to utilize all the expertise that is in this room. Certainly, the collective judgment of the people in this room and the commitment of the young people that are here from all across the Pacific area, the dedications they are expressing by virtue of being here today, is far more than I am individually able to produce or certainly able to contend with.

I make no case to you that I'm in a better position as a member of Congress to be able to give a clear expression to those solutions to the problems or the challenges that I have outlined. But I can tell you this, the fact is that there are elections and after this November, 435 people will represent almost 300 million people in the United States of America, tens of millions more across the Pacific, our brothers and sisters, our island friends across the Pacific and all the way to the Rim and, in fact, our extension to the planet when we talk about fisheries and the various ocean environments. Those 435 of us, when we evolve into our committees, have to make those decisions and are going to make those decisions.

In conclusion, what is required is that we have to put the best possible people, the best informed people, we can into those positions to make those decisions and you have to reach out to those of us who must make these legislative decisions with the information that you possess. The worst thing that can happen to me, the worst thing that can happen to these young people who are expecting the adults in the room to act on their behalf as we go into the 21st century, is to be contemptuous of the political process or to say that the political process is something you would rather divorce yourself from, or something that would require the kind of attention from that you find irritating or debilitating. Or somehow an expression of activity which you have to add to all the other endeavors that you are responsible for, it can wear you out if nothing else. But the failure to do it then leaves people like myself in the position of almost having to almost fend for ourselves to try to figure out what we are going to do, where we are going to go, how best we should do it.

I'm not adverse to or in any way not used to the idea of many different points being made all at the same time, some of which are contradictory, some of which are paradoxical. I find that, parenthetically, more often than not. I don't find so often that the issues are necessarily always one of confrontation and contradiction. More often, and I would take the longline fishing example again and good environmental controls, they're paradoxical. They should not be seen as being in opposition. When you get into court, because court by definition is a paradoxical situation in which there is one side and there is another side and, instead of running parallel tracts, they crash into one another.

Our goal should be those of us who care about everything associated with the ocean environment from debris on through to the other things I have touched upon. Our goal should be to stay away from that, to work with one another, to be committed to one another and to do the kind of thing that I'll talk about just very briefly—what we did when I was in the Hawai'i State Senate and how we conducted business there.

We had two rules—no one left when we sat down to get an issue resolved, no one left, and no one punched anyone. Now I see some smiles on people's faces because I notice you

were looking around the room, some of you, to see what person you would like to punch. Now maybe you haven't done it yet, but you've thought about it. Now no one leaves and no one punches another. Now on the surface that sounds funny, but the point behind it is that you must make a commitment—in other words to say we're going to resolve these issues, we're committed to it, we're not leaving until we get it done, we're going to respect each other, and we're going to give the other person the benefit of the doubt with respect to their position. And if we commit ourselves to the ocean, to the betterment of the planet, the betterment of everything associated with those things we care about most deeply where the ocean is concerned, then we can do this.

As a practical matter, I want to leave something with the young people as to how we might do this and as to how we can accomplish it. The Western Pacific Fishery Management Council, along with other people associated with issues like longline waters, has been able to testify directly to us from Washington through tele-conferencing.

So what I want to leave you with, having given you my theoretical sermon, is a practical way not to sin anymore. Then, we absolutely have to try to make use of teleconferencing.

I would like to be able to, and I hope you folks will consider the idea, perhaps by resolution form or if you're associated with some of the institutions that I have mentioned, take up some challenge to push for budget consideration for having teleconferencing in the Pacific so that we can bring in some of the people from Palau to Arrota to Guam in order to speak directly to us in real time. With teleconferencing we can do that.

I, for example, have not been able to get to some of the islands in the Pacific, other then Guam, even though I have that responsibility being on the Resources Committee. I have not been able to work out the logistics between my responsibilities to the Armed Services Committee, Hawai'i, the mainland, and so on when we were actually able to physically travel to the Pacific.

I've been unable to do it, but with teleconferencing in real time we can communicate with one another directly. So I hope that you will take up that issue. Teleconferencing might enable us to meet one another, to speak with one another, to get to know one another a little better than we've been able to intellectually and physically up to this point. So with all those admonitions I thank you once again for this opportunity to be here with you. I hope I've had something to share with you that you'll find a practical value in this conference. I want to indicate to you on behalf of Representative Don Young, the Chairman of the House Resources Committee and the Senior Democrat on the Committee, the Honorable George Miller of California, that they and all the members of the Resources Committee—regardless of their political persuasion—are committed to seeing to it that you have a success with this subject matter that's before you in these days here in Honolulu. We are committed to working with you to see to it that we can all be proud of the work we do with the ocean, environment, and all of the issues that affect the health and welfare of our planet. Thank you very much and aloha.

• Transcribed from a speech given on August 9, 2000.

MARINE DEBRIS:
BRIDGING POLICY, SCIENCE, AND MANAGEMENT

Rebecca Lent, Regional Administrator, Southwest Region,
National Marine Fisheries Service, Long Beach, California

INTRODUCTION

It is an honor for me to represent the National Marine Fisheries Service (NMFS) and our Assistant Administrator, Penny Dalton, at the International Marine Debris Conference. Penny and I are grateful to the organizers for including us on the program and we want to congratulate you on an excellent conference.

In my presentation, I wish to provide a brief overview of NMFS program in marine debris. As noted in the excellent presentations and discussions of this conference, marine debris from both land and maritime origins pose a serious threat to ecosystem health in the Northwestern Hawaiian Islands (NWHI). NMFS is addressing marine debris through a comprehensive, collaborative program involving a number of partner agencies. NMFS efforts focus on assessment and monitoring, marine debris removal, impact assessment, and outreach programs.

ASSESSMENT AND MONITORING

Annual monitoring and removal of derelict fishing gear from the beaches of the NWHI has been conducted since the early-1980s during beach censuses for Hawaiian monk seals at French Frigate Shoals, Laysan and Lisianski Islands, and Pearl and Hermes and Kure Atolls. In 1996, annual surveys of derelict fishing gear and other marine debris on the surrounding coral reefs, via diving and reconnaissance activities, were initiated by the NMFS Honolulu Laboratory. In FY2000, reef reconnaissance surveys were conducted at Pearl and Hermes, Kingman, and Palmyra Atolls, and Lisianski, Jarvis, Howland, and Baker Islands. The surveys are conducted in partnership with the U.S. Coast Guard, U.S. Fish and Wildlife Service, State of Hawai'i, local governments, and many non-governmental organizations (NGOs). These surveys collect data on the type of debris, size, distribution, and density. Once the surveys are completed, the debris is removed.

These surveys have documented that the most common type of fishing debris is trawl netting. The critical importance of addressing marine debris was emphasized by the finding that density of debris was highest in some of the nursery grounds for the critically endangered Hawaiian monk seal. Derelict fishing gear appears to be a greater threat to ecosystems in the NWHI than in other areas surveyed.

Additional surveys are planned in FY2001, as funding allows, and will be conducted at Pearl and Hermes and Kure Atolls. In addition, previously surveyed sites at French Frigate Shoals and Lisianski Island will be re-surveyed in order to monitor debris accumulation rates, including that of derelict fishing gear.

MARINE DEBRIS REMOVAL

Under this program, marine debris removal has been substantial. Some 35 metric tons of derelict fishing gear have been removed in the course of the program. Numerous agencies participated in the cleanup effort, including the U.S. Coast Guard and Navy, U.S. Fish and Wildlife Service, University of Hawai'i Sea Grant program, Hawai'i Coastal Zone Management Program, City, County and State partners, and several private groups and NGOs. The accomplishments of this partnering venture earned a National Performance Review Silver Hammer Award. Removal efforts will continue through the end of 2000 as well as in 2001, again focusing on a multi-agency, cooperative approach.

Once the debris is removed, efforts are made to identify the sources of derelict fishing gear based on the type of gear collected. The NMFS Honolulu Lab is initiating efforts to create a catalog that will assist researchers in identifying derelict fishing gear. Such efforts will be critical in advancing initiatives to address fishing gear debris through international efforts.

IMPACT ASSESSMENT AND OUTREACH

In measuring the density and type of marine debris around various islands and atolls, researchers have been able to assess the actual and potential impacts of marine debris on coral reef ecosystems. For example, Hawaiian monk seals were observed entangled in fishing nets an average of fifteen times per year in the early-1980s. Impacts on coral reefs as well as threatened and endangered turtles are also assessed through this program. Outreach will include educating the fishing and maritime industries about the problems of derelict fishing gear and the potential to minimize future damage through gear modifications and/or identification. These outreach efforts will, of necessity, be international, with collaborative efforts with other Pacific Rim countries.

OUTLOOK

The marine debris program of the NMFS Honolulu Lab has demonstrated the need for a collaborative approach in addressing this serious problem. Not only is collaboration among local, federal, and private partners necessary in identifying, measuring, and removing marine debris, but international efforts will be essential in making a long-term difference. As noted in presentations by representatives of the U.S. State Department, measures designed to reduce marine debris from derelict fishing gear should be incorporated into the conventions of international fishery management organizations. As in domestic fisheries, gear identification as well as avoiding measures which would lead to derby fishing can contribute to reductions 0in lost or discarded fishing gear.

Again, I thank the conference organizers for providing this opportunity to address you today, and I compliment you for an excellent conference.

- Transcribed from a speech given on August 9, 2000.

BRIDGING THE POLICY, SCIENCE, AND MANAGEMENT STREAM

Roger Rufe, President, Center for Marine Conservation, Washington, D.C.

Good afternoon. I'm Roger Rufe, president of the Center for Marine Conservation. It is a real privilege for me to be here with all of you, and to talk about something that is near and dear to my heart—how to work effectively with others, or as I refer to it at CMC, being "shipmates."

We're calling it "bridge building" here, but it amounts to the same thing—working together for a common goal, a goal no one agency, discipline, or constituency can reach on its own. Understanding and trusting each other enough to share information and resources that enable others to do their jobs effectively, and having one's own efforts enhanced through the efforts and achievements of others. In short, teamwork.

I came to CMC last November after thirty-four years in the U.S. Coast Guard. Those of you who have served on ships understand the deep and significant implications of the word "shipmates," and the importance of all "hands" working together, sometimes literally, for your survival.

We're here at this conference—and I know some of you have been here since the beginning, sixteen years ago—working for the survival of ocean ecosystems and the wildlife that depends on clean, healthy ocean waters.

I believe—indeed it's been demonstrated over the years—that marine debris is an area in which great strides can be made through "bridge building" and teamwork.

The Center for Marine Conservation has long operated on a core belief that building bridges among various constituencies is absolutely critical to any conservation success. And science is the foundation that supports all these bridges among conservation advocates, policy makers, users of natural resources, and citizens alike.

These tenets have fueled our efforts over the years to hammer out, with the assistance of partners too numerous to name, policies, legislation, and regulations that made good conservation and economic sense.

Commitment to teamwork and inclusivity now drives our efforts to protect special places in the ocean from adverse human impacts. We know that a marine sanctuary that is not supported by a majority of citizens, user groups, local and state, as well as the federal government will be a sanctuary in name only, and does little to safeguard the wildlife and ecosystems within it. And without continuing scientific research into the effects of human activities and management measures we have no way of knowing whether such a sanctuary or protected area is accomplishing its purpose. These same principals have always shaped our approach to marine debris.

When we began looking at marine debris and its effect on ocean wildlife in 1985, we learned about the prevalence of plastic resin pellets on beaches. By that time we had established a relationship with the Society of the Plastics Industry (SPI) that we took advantage of to address the pellet problem. As many of you know, large quantities of plastic resin pellets were being found in dead seabirds around the world, because the pellets were the same size, shape, and color of fish eggs.

Our colleague at SPI had no idea of the extent of the problem until CMC took him to a Texas beach and showed him. Since then, plastics manufacturers, with encouragement and assistance from SPI, improved their pellet transport and containment practices to greatly reduce the number of pellets escaping into the environment. They are educating their employees about the changes and why they are so important.

But CMC's efforts on marine debris are not limited to working with just one industry. We have built bridges elsewhere that dramatically changed national policy.

The massive, annual outpouring of citizen action known as the International Coastal Cleanup, now in its fifteenth year, has tremendous potential for effecting change. We harnessed that potential as early as 1987, when cleanup volunteers throughout the Gulf of Mexico signed petitions urging the U.S. Senate to finally ratify the MARPOL Treaty's Annex V, which addressed solid waste—the very items they were collecting from the beach each September. In that instance, the cleanup data, which showed the extent of the problem, combined with an informed and concerned citizenry helped turn the "wheel" of national government. And the environment has benefited. Since the implementation of MARPOL Annex V in 1989—made possible through U.S. ratification—the amount of sea-borne debris collected at the International Coastal Cleanup has shown a marked quantifiable decrease.

NOAA's Marine Debris Information Office is another successful example of bridge building and load sharing. NOAA received funding in 1988 to develop and distribute educational materials about marine debris to all interested parties—the general public, educators, fishermen, ship captains, and marina operators. CMC had the capacity—and where we didn't have it we could quickly create it, perhaps more quickly than could a government agency—to implement the program. Until federal priorities changed and the funding was taken away from NOAA in 1996, CMC was the conduit and information source on the topic, and we responded to tens of thousands of requests.

If all of what I have said so far is true—if the success of partnerships is so well documented, and if marine debris is so well suited to partnerships, then why, in the sixteen years since you all first met to discuss the problem, are we still meeting to discuss the problem?

First we must recognize that this effort requires dedication for the long haul. The problem wasn't created overnight and won't be solved quickly. Also, we don't use partnerships enough.

I don't know if it's human nature, but it certainly seems to be institutional nature that, once we gain a certain level of understanding of or expertise on an issue, we turn inward, honing our particular skills, approach, and perspective. Once we've found our niche, we refine and repeat it to the point where we forget to look out and beyond our expertise to see what others are doing and to ask how our efforts can benefit from others' involvement. Conservation advocates are as guilty as policy makers and scientific experts.

Part of the problem is that, while we all share the same goal of reducing marine debris, our approaches are different and sometimes appear to be exclusionary. Scientists want to promote and advance scientific research and prefer some level of certainty before taking an action. Environmentalists, on the other hand, working within the reality of dwindling and endangered resources, advocate action before it's too late and policy makers must weigh the effectiveness of whatever decisions they make against competing interests and players, and often in mind of an uncertain budget process.

What generally results from these conflicts of approach and priority is a spiral of increasing mistrust and misinformed opinions of the other groups' motives and expertise. We have myths about each other that we simply have to overcome if we are to build meaningful, successful partnerships. Here are a few:

- Researchers have no grasp of the real conservation issues. They are interested in pure science and have no desire to play a role in advocating for stronger ocean conservation or policy.
- Environmental groups are only interested in advocacy and fund-raising on high-profile ocean conservation issues. They are not interested in research and they are radical in their approach to conservation.
- Government agencies and government regulations are burdensome and an obstacle to real progress on conservation.
- Government agencies are ineffective. They are not doing enough to conserve ocean resources.
- Industry is interested only in the bottom line and cannot contribute to effective solutions.
- Citizens are fickle and will lose interest in difficult conservation issues. They do not have the time, education, or inclination to participate effectively in ocean conservation.

I don't believe any of that and I hope you don't either, but there are those that do. We must move beyond these myths if we are to see real progress in eliminating marine debris. We no longer have the luxury of choosing whether we will work cooperatively together. We simply must.

Government funding for applied and basic research has and will likely continue to decrease. Government funding for marine conservation is limited, often restricted, and

not always a priority for Congress, as you folks from NOAA and NMFS know all too well. And ocean environmental issues are and will continue to become more complicated. But the good news is that there are ways we can facilitate partnerships and bridge building.

First, the best public policy comes when the affected industry is fully and openly engaged in the policy making process. Second, scientists and environmental groups must improve their understanding of the affected industries, state and local policy-making, and federal regulatory and appropriation processes, and engage more effectively in them. Only by doing so will they affect conservation policy and secure increased funding for conservation. Third, scientists and environmentalists must work with policy makers and industry to create policies and regulations grounded in sound science. Fourth, scientists and environmental groups, together, must develop sound, convincing scientific arguments. They must advocate for stronger marine resource and ecosystem conservation and they must do a better job of educating the public about marine debris and other conservation issues.

Fortunately, we do have great examples of partnerships that work. One effort that you'll hear more about tomorrow was the removal of tons and tons of derelict fishing net and other gear from the Northwestern Hawaiian Islands. This effort took place in November of 1998 and involved fourteen organizations working cooperatively—from NOAA and NMFS to the City and County of Honolulu, from the University of Hawai'i to Browning Ferris, from CMC to the Hawai'i Wildlife Fund.

From the start, NMFS had bigger objectives than simply cleaning the reefs. They wanted to bring other federal and even state agencies into the field of debris cleanup. They wanted to develop expertise and they wanted to establish sites for a study of debris accumulation and its impacts.

To make a long story short, in this first expedition about twenty divers worked from two vessels—one Coast Guard and one NOAA vessel. They gathered floating gear and cut away gear that was entangled on reefs and rocks and brought it back to the Coast Guard cutter Kukui where gear experts and other scientists sorted and catalogued it, and made rough assessments as to the origins. In six days divers collected more than six tons of net and gear.

This demonstration of teamwork was recognized by Vice President Gore with a National Performance Review Silver Hammer Award for Reinventing Government.

Then in November 1999 the effort was repeated, this time at Lisianski Island, Pearl and Hermes Reef, and Midway Island. The "net" result, so to speak? In thirty days 25 tons were collected.

The nets, or samples of each, from both trips are still being analyzed to determine which fisheries and where in the vast Pacific Ocean these nets are coming from. Once some conclusions can be drawn, CMC will work with the government and the fisheries involved in finding ways to prevent the nets from becoming debris—either through fishermens' education programs, new technology, or other ideas that I hope will emerge from this conference.

CMC is proud to have been a part of these projects. We look forward to continuing them with NOAA, NMFS, and the other partners on future expeditions.

Inspired by these successes, this past May CMC staff and the tribal government of St. Paul, in Alaska's Pribilof Islands, conducted a three-day cleanup of derelict net. Together we removed about three tons of net and other gear from the rocky shores of St. Paul, where many species of seabirds nest every year and where northern fur seals—particularly vulnerable to entanglement in fishing gear—gather to breed each spring. Again, meticulous records were kept on what was collected and the information has been sent to NMFS for analysis.

NMFS plans to conduct another Hawai'i net retrieval expedition this fall, going to new sites. From the data they've amassed, CMC and the Western Pacific Fishery Management Council are planning to compile a net reference catalog. Future goals include expanding the project internationally to include other gear experts and developing a web site specifically for information on this project and its findings.

I'll close by supporting Dan Basta's exhortation to you yesterday. Let's use this conference to redouble our efforts, renew and strengthen partnerships, and in very specific ways, begin to lay out an action plan. This conference should not only rekindle enthusiasm by celebrating past successes, but by recognizing that we must focus on those areas where we can have an impact, and it must be a focus for the long haul.

Thank you.

BRIDGING THE POLICY, SCIENCE, AND MANAGEMENT STREAM

Michael Julian, Chairman, Marine Environmental Protection Committee, International Maritime Organization, Australia and Executive Manager, International Relations, Australian Maritime Safety Authority, Australia

INTRODUCTION

First, may I take this opportunity to express my appreciation to the conference organizers and, in particular, Mr. Allen Tom and the Hawaiian Islands Humpback Whale National Marine Sanctuary for inviting me to this conference and for making my participation possible.

Observations

My observations over the past two-and-a-half days, listening to the various presentations and talking to conference delegates, are:

1) There is an impressive amount of work being undertaken with regard to marine debris and derelict fishing gear, in particular.
2) Those involved come from three quite separate streams of people as identified in the title for this panel discussion.
   - We have a large group of policy people. This group is well represented both at the federal and state level.
   - We have quite a sizeable science group, in which I include those sharing environmental concerns.
   - But where are the representatives of the fishing industry to represent the fishery management stream?

Early on Monday morning I went through the list of conference participants to see how many represented the fishing industry. Out of approximately two hundred conference delegates I counted eight or so individuals, most representing fishery councils, which means they probably fit more into the policy group. This left two or three who could be seen as truly representing fishing industry management.

I appreciate the economic reasons to bring fishing industry personnel to a conference such as this. We have heard the argument that fishers cannot afford to "waste time" retrieving derelict fishing gear. Equally it would appear they could not give up valuable fishing time to join us in conferences like this.

However, as major stakeholders in this issue, a means has to be found to closely consult with fishing industry management. They must be involved in reaching solutions; otherwise no solutions will be achieved. Perhaps a separate forum can be established where the outcomes of this conference—the action plan—can be discussed, and the views of the fishing industry obtained regarding the practicality and economic impact of the conference recommendations.

A related exercise could be to compile a list of all stakeholders to ensure that in any future conferences of this nature that we do have full representation. This may well have already been done and we may have full representation apart from the fishing industry community, but more practitioners would help. We also need greater involvement from governments of all Pacific Rim countries and to involve them in future conferences on this topic.

OWNERSHIP

In coming back to address the issue of bridging the various streams, a key issue that has already been identified, but needs emphasising, is "ownership." Who has "ownership" of the problem of marine debris, particularly derelict fishing gear the subject of this conference? The simple answer: all of us at this conference should have ownership.

Government Organizations

The more complex issue to be resolved is which governmental organizations should have ownership? This is a problem both at the national and international level. There is probably no single agency suited to undertake the overall task, therefore there needs to be a clearly identified alliance of the two or three key agencies, with one agency clearly identified and tasked with the responsibility of having coordination.

The agencies should be those with responsibility for fisheries management at the federal or national government level, those with marine environmental responsibilities (NOAA and the EPA in the U.S.). The third group should be the agency responsible for administering the MARPOL 73/78 Annex V regulations (the USCG in the U.S.).

At the international level it is probably organizations like FAO, UNEP and IMO which must work together to bridge the gaps. However, before embarking on establishing such an alliance at the international level, the issue of marine debris has to be clearly demonstrated to these UN organizations as being a significant problem.

Currently, I can say it is not even an issue at the IMO's Marine Environment Protection Committee simply because member governments have not submitted papers informing the committee that it is a problem. But from what I have seen and heard here at this conference, it is a significant global problem with very little being done to minimize the environmental as well as economic impact of it. Similarly, FAO and UNEP have probably not been made aware either.

We should also include international non-government organizations such as the International Union for the Conservation of Nature, Marine Stewardship Council and the World Wide Fund for Nature (WWF).

Other groups that need to be involved, but at the regional level, come under the umbrella of regional fisheries management organizations (RFMOs) responsible for managing high seas and or shared fish stocks. There are several of these and as an example include the Commission for Conservation of Antarctic Marine Living Resources (CCALMR), Indian Ocean Tuna Commission (IOTC) and the Commission for the Conservation of Southern Bluefin Tuna (CCSBT).

It is a challenge to broaden the scope of the various fish management or resource agreements to include management of ecological issues including marine debris and loss of fishing gear. It is up to governments as well as the fishing industry represented in these groups to achieve this.

A broader agreement, the UN Fish Stocks Agreement, which is currently awaiting ratification, will provide a broader framework from which regional fisheries management organizations operate.

The FAO Code of Conduct for responsible fishing, together with the FAO International Plan of Action to prevent, deter, and eliminate illegal, unreported, and unregulated fishing (IUUF), are key instruments which could be used in the future to better manage the problem of derelict fishing gear. In the future IUUF will be particularly relevant to the flag state and port state roles and responsibilities envisaged by FAO.

With the potential of introducing port state control on foreign fishing vessels, port state vessel inspections will be able to be made to identify fishing gear usage and comparisons made with gear supplied and remaining. If there is any shortfall that cannot be explained, the vessel and master could be held accountable. Providing legislation is in place, they could also be subject to penalties.

With three groups having or sharing ownership, the problem will still exist unless there is a political drive or directive to fix the problem.

It would appear that we need an "Exxon Valdez" equivalent in marine debris and derelict fishing gear terms to motivate our politicians and the general public. I am not sure what would constitute an equivalent incident other than much greater live television footage of marine mammals entangled in derelict fishing gear and the large quantities of fishing debris washed up on the world's beaches on a regular basis.

The coordination issue is one identified in the Prevention and Legal Issue Working Group of this conference—particularly the coordination of information exchange—and it is likely this group will recommend the creation of a marine debris web site. This would be a depositary for a wide range of information, research data, ideas, possible solutions, and links to other relevant sites. This would be a particularly valuable tool in bridging the policy, science, and management streams, and in building partnerships.

As we are honoured to have on our panel the President and Chief Executive Officer of the Centre for Marine Conservation, I would like to invite him to consider the feasibility of his organization hosting such a web site. It would be beneficial for an NGO to be involved in this way and the CMC has clearly demonstrated its commitment to solving the issue of marine debris. Therefore it would be an excellent choice to host such a marine debris web site.

Youth Organizations

Another means of bridging the gaps is to utilize environmental programs designed for our younger generation, particularly bearing in mind the challenging questions they asked us on Monday at the opening session. Recently, in Australia, a group of dedicated private sector groups launched AUSMEPA, which stands for Australian Marine Environment Protection Association. AUSMEPA is modelled on the Hellenic Marine Environment Protection Association's HELMEPA, which has been in operation for some eighteen years. Funded by Greek ship owners, it has a key objective of providing education and training in both maritime safety and marine environment protection. AUSMEPA is more attuned to HELMEPA Junior, which is designed to involve school children in education programs which focus on the importance of preserving the marine environment. Seeing the representatives of several Pacific islands schools at this conference serves to illustrate the importance of educating our younger generation in the significance of environmental preservation and sustainability.

Fishing Industry Organizations

Yet another means of bridging the gap is the need for greater collaborative arrangements between the range of organizations involved in the fishing industry. Using a comparative example in recent years is the shipping industry, which has a significant problem trying to rid the world of sub-standard shipping, has been the need to engage in the debate related interests such as insurers, cargo owners, charterers, and ship brokers.

We could do something similar in our efforts to rid the oceans of derelict fishing gear. By opening dialogue with the equivalent groups in the fishing industry they will have a better understanding of the concerns and hopefully join with us in seeking solutions. Insurers may be able to devise a scheme, which will help minimize loss of fishing gear. We need to address those groups who purchase fish catch and involve them to use leverage on the fishing companies and or vessels they purchase from. I am not sure if brokers have a role in the fishing industry, but if they do, they too may be in a position to influence retention of fishing nets for proper disposal ashore. Equally important in these discussions are fishing gear equipment manufacturers.

An important issue, which appears to be emerging from some people at this conference, is that IMO should do more with regard to preventing derelict fishing gear from being dumped in the ocean. However, before member governments seek greater IMO involvement in this matter they must first look at their own back yard. Are the governments representing the Pacific Rim fully implementing the Guidelines to Annex V? I would suggest that neither the U.S. nor Australia have fully implemented the guidelines. It would appear that MARPOL 73/78 Annex V, as currently drafted, is adequate but where the problems seem to be arising it is because of lack of implementation and enforcement. Implementation and enforcement of international fishing vessel regulations and agreements is up to individual member government fishing agencies to monitor and ensure compliance.

SUMMARY

- We have a vast number of organizations, from government agencies, NGOs, industry, and the community working for the prevention and removal of derelict fishing gear. Each group, while not working in isolation, could work in a more coordinated way, particularly in the fishing industry. For example, vessel owners, managers, and skippers.

- We need to encourage the governments of Pacific Rim countries to be more involved and also work toward the objectives of this conference.

- We need to find some mechanism for "ownership" of the marine debris and derelict fishing gear problem at both the national and international level.

- Finally we need to exert influence at the main UN organisations, particularly the FAO and other international and regional fisheries management organisations.

Thank you very much for your attention.

- Transcribed from a speech given on August 9, 2000.